

Appn. Serial No. 10/800,828  
Amendment Under 37 C.F.R. § 41.33

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1        1. (Previously Presented) A method of effecting secure communications between a server and a client, the server executed in a server computer, the method comprising:
  - 3            detecting, at the server computer, a client connection at a first port;
  - 4            providing, by the server computer, the client with a decoy port number; and
  - 5            providing, by the server computer, services to the client on a second port having a second port number that is mapped to the decoy port number, wherein the second port number is different from the decoy port number.
- 1        2. (Previously Presented) A method as defined in Claim 1, wherein the decoy port number is provided to the client by the operation of a routine that is associated with the server, the routine executed in the server computer.
- 1        3. (Original) A method as defined in Claim 2, further comprising:
  - 2            launching the server on the second port; and
  - 3            monitoring the second port for a connection by the client.
- 1        4. (Original) A method as defined in Claim 3, further comprising:
  - 2            if there is no connection by the client within a predetermined time interval, terminating execution of the server on the second port.
- 1        5. (Previously Presented) A method as defined in Claim 2, further comprising:
  - 2            maintaining, in the server computer, a table of available decoy port numbers that are mapped to valid port numbers.

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1       6. (Previously Presented) A method as defined in Claim 5, wherein the table  
2       maintained in the server computer corresponds to a second table maintained at a client  
3       computer on which the client is executed, the second table mapping decoy numbers to  
4       valid port numbers at the client computer.

1       7. (Original) A method as defined in Claim 6, further comprising:  
2       monitoring the second port for a connection by the client, and  
3       if there is no connection by the client within a predetermined time interval, terminating  
4       execution of the server on the second port.

1       8. (Cancelled)

1       9. (Previously Presented) A computer system comprising:  
2       a plurality of ports, each port having a respective port number;  
3       a server application; and  
4       a routine that, if executed, is operative to:  
5              detect a client connection at a first port;  
6              provide the client with a decoy port number; and  
7              provide services to the client on a second port having a second port number that is  
8              mapped to the decoy port number, wherein the second port number is  
9              different from the decoy port number.

1       10. (Original) A computer system as defined in Claim 9, wherein the routine, if  
2       executed, is operative to:  
3              launch the server application on the second port; and  
4              monitor the second port for a connection by the client.

1       11. (Original) A computer system as defined in Claim 10, wherein the routine, if  
2       executed, is operative to terminate execution of the server application on the second port if there  
3       is no connection by the client within a predetermined time interval.

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1           12. (Previously Presented) A computer system as defined in Claim 9, wherein the  
2 routine, if executed, is operative to maintain a table of decoy port numbers mapped to  
3 corresponding valid port numbers.

1           13. (Original) A computer system as defined in Claim 12, wherein the routine, if  
2 executed, is operative to:

3                 launch the server application on the second port subsequent to providing the decoy port  
4                 number to the client.

1           14. (Cancelled)

1           15. (Previously Presented) A server computer system comprising:  
2                 a plurality of ports, each port having a respective port number;  
3                 a first server application; and  
4                 a first routine that is associated with the first server application and that, if executed, is  
5                 operative to:  
6                     detect a client connection at a first port;  
7                     transmit a decoy port number to the client;  
8                     terminate the connection to the first port; and  
9                     provide services to the client on a second port having a second port number that is  
10                  mapped to the decoy port number, the second port number being a valid  
11                  port number that is different from the decoy port number;  
12                 a second server application; and  
13                 a second routine that is associated with the second server application and that, if  
14                 executed, is operative to:  
15                     detect a client connection at a third port;  
16                     transmit a second decoy port number to the client;  
17                     terminate the connection to the third port; and  
18                     provide services to the client on a fourth port having a fourth port number that is  
19                  mapped to the second decoy port number, the fourth part number being

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20 another valid port number that is different from the second decoy port  
21 number.

1 16. (Previously Presented) A server computer system as defined in Claim 15,  
2 wherein the first routine and the second routine, if executed are operable, respectively, to:  
3 terminate execution of the first server application on the second port if there is no client  
4 connection within a predetermined time interval; and  
5 terminate execution of the second server application on the fourth port if there is no client  
6 connection within a predetermined time interval.

1 17. (Previously Presented) A method executed by a client computer, comprising:  
2 attempting to access a server application on a first port of a server computer;  
3 receiving, from the server computer, a decoy port number that is an invalid port number;  
4 translating the decoy port number to a valid port number; and  
5 connecting to the server application on the valid port number.

1 18. (Previously Presented) A method as defined in Claim 17, wherein the decoy port  
2 number is translated using a wrapper script associated with a client application in the client  
3 computer.

1 19. (Previously Presented) A method as defined in Claim 17, wherein the decoy port  
2 number is translated using code embedded in a client application in the client computer.

1 20. (Previously Presented) A method as defined in Claim 17, further comprising:  
2 mapping the decoy port number to an intermediate port number; and  
3 effecting an offset to the intermediate port number to produce the valid port number.

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1           21. (Previously Presented) A computer system comprising:  
2           a plurality of ports, each port having a respective port number;  
3           an application; and  
4           means for effecting secure access to the application by redirecting a client from a first  
5           port to a second port, wherein the means for effecting secure access comprises:  
6           a routine that, if executed, is operable to provide the client with a decoy port number that  
7           maps to a second port number of the second port, wherein the decoy port number is an invalid  
8           port number and the second port number is a valid port number.

1           22. (Cancelled)

1           23. (Previously Presented) An article comprising a machine-readable storage  
2           medium that comprises instructions that, if executed, cause a server computer to:  
3           detect a connection at a first port of the server computer by a client application;  
4           transmit, to the client application, a decoy port number, wherein the decoy port number is  
5           an invalid port number; and  
6           cause a server application in the server computer to be launched at a second port that has  
7           a second port number mapped to the decoy port number, the second port number  
8           being a valid port number.

1           24. (Original) An article as defined in Claim 23, further comprising instructions, that,  
2           if executed, are operable to:  
3           monitor the second port; and  
4           if there is no connection by the client application within a predetermined time interval,  
5           terminate execution of the server on the second port.

1           25. (Original) An article as defined in Claim 23, wherein the storage medium further  
2           comprises a table of decoy port numbers that are mapped to valid port numbers.

1           26. (Cancelled)

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1        27. (Previously Presented) A client/server system comprising:  
2              a server computer system; and  
3              a server application installed on the sever computer system and comprising instructions  
4              that, if executed on the server computer system, are effective to:  
5              detect a connection at a first port by a client application;  
6              transmit, to the client application, a decoy port number, wherein the decoy port  
7              number is an invalid port number;  
8              terminate the connection on the first port; and  
9              provide services to the client application on a second port having a second port  
10             number that is mapped to the decoy port number.

1        28. (Previously Presented) A client/server system as defined in Claim 27, further  
2        comprising:  
3              a client computer system; and  
4              a client application installed on the client computer system and comprising instructions  
5              that, if executed on the client computer system, are effective to:  
6              attempt to access the server application on the first port;  
7              translate the decoy port number to the second port number; and  
8              connect to the server application on the second port.

1        29. (Cancelled)

1        30. (Previously Presented) A client/server system as defined in Claim 28, wherein  
2        the client application further comprises instructions that, if executed on the client computer  
3        system, are effective to:  
4              map the decoy port number to an intermediate port number; and  
5              impart an offset to the intermediate port number so as to derive the second port number.

1        31. (Previously Presented) The method as defined in Claim 1, wherein providing the  
2        decoy port number comprises providing the decoy port number that has no meaning to an

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3 unauthorized client computer, but the decoy port number is mappable to the second port number  
4 by an authorized client computer.

1 32. (Previously Presented) The computer system as defined in Claim 12, wherein the  
2 decoy port number provided to the client enables the client to map, using a second table  
3 associated with the client, the decoy port number to the second port number such that the client  
4 can connect to the computer system at the second port number.

1 33. (Previously Presented) The computer system as defined in Claim 9, wherein the  
2 decoy port number has no meaning to an unauthorized client computer, but the decoy port  
3 number is mappable to the second port number by an authorized client computer.

1 34. (Previously Presented) The article of Claim 23, wherein the decoy port number is  
2 meaningless to an unauthorized client computer, but the decoy port number is mappable to the  
3 valid port number by an authorized client computer.